

# POULTRY FACTS



## KEEP POULTRY YARDS CLEAN

Where Only One Place is Available for Chickens It May Be Kept Sweet by Use of Lime.

The farmer who has abundant range for his chickens, where they may secure plenty of green food and insects, and where the range may be changed from season to season, has a great advantage over the man who must keep his stock in a small space.

If only one place is available this may be kept in sweet, healthy condition by the use of lime and by plowing and cropping between seasons. If not possible to plow up a large space at one time, divide the lot and freshen up one part of it, then turn the stock into that portion—and plow and renovate the other half. Even when cared for in the best possible manner, this is not as desirable as a change to new ground or ground that has been used a season or two for growing crops.

### Keep Vessels Clean.

Be sure that the vessels used for skim milk are kept clean. It is best to set out a clean crock each time milk is given. Wooden troughs are unfit for milk in summer. Milk is an animal product and soon putrefies in the hot sun. Putrefied animal products set up an irritation in the digestive tract known as ptomaine poisoning, a fatal malady. Always set the milk vessels in the shade.

## HAWKS, CROWS AND SKUNKS

Three Most Dangerous Enemies of Chickens Fancier, But They Can Be Trapped or Frightened Away.

It is pretty safe to say that at least one-tenth of the chickens hatched are destroyed by some species of carnivore. I used to lose on an average 100 chicks a year by hawks until I got a dog and trained him, a writer in New York Sun says. After that I did not lose any, so as a cure for hawks I place a good dog first; second, a gun, and third, a steel trap fastened by a chain to a pole in the chicken yards.

Shoot one or two hawks and hang the carcasses on tall poles, and they are a warning against others. The hawk wants his meat alive, so you have some idea how to fight him; but the crow is not particular whether it is dead or alive. He takes it any way that comes handy and is more ingenious in his methods of getting it. It is generally a case of watching, with a shotgun handy, for Mr. Crow, as he is much too cunning to be caught in a trap.

The skunk can be caught with a trap, and if he has been in a chicken house and left undisturbed you can count on your game if you go to the trouble. Leave the house with chickens in it just as it was, but close up all entrances to it but right where you are going to set the trap. Then set the trap, securing it to a stout stake and covering with grass or hay. Mr. Skunk surely will come back and walk right into the trap unless your neighbor has caught him.

## REMOVE MALES FROM FLOCK

Unfertilized Eggs Are the Only Ones That Can Be Guaranteed During the Summer Season.

Most people believe that an egg must be set under a hen, or put in an incubator before it will start to hatch, says American Cultivator. Eggs will start to hatch at less than ninety degrees of heat. Many eggs are submitted to this or higher temperatures for several hours if not days, before reaching the consuming public.

When the germ inside the egg commences to develop, the edible qualities of the eggs are lessened or the egg goes off flavor. Eggs may be kept at an incubating temperature for a day, when the chicks will start growing, next day the temperature may be so low that the chick is killed, and from that point decomposition begins, possibly, slowly, but nevertheless, the egg is gradually going bad.

There are almost innumerable ways in which eggs may be started hatching during the summer, such as forgetting to gather the eggs daily, and leaving some under broody hens over night, leaving them exposed to the sun or in warm rooms, stores, cars, etc., or in the kitchen cupboards.

No one can guarantee eggs to their customers during warm weather unless the males are removed from the flock. Unfertilized eggs are essential.

**Rest for First Two Days.** During the first two days of the chick's life it should rest and be kept warm. It is better without having food until it is forty-eight hours old.

**Care of Water Vessels.** Fill the water fountains at least twice a day this hot weather. Scald them out frequently, for even fresh water leaves a stale scum on vessels at this season. A fresh piece of charcoal should be placed in the water vessel once a week all summer.

**Poultry Essentials.** Feed plenty of clean, wholesome food and water, and provide plenty of clean dry nests in a clean poultry house.

**Essentials Overlooked.** Particular stress has been put upon the value of lime in all soils growing clover and alfalfa, with the result that many overlook other essentials and seem to think they will have clear sailing when soil acidity is corrected.

## PROPER HENS FOR HATCHING

Select Those Which Have Proved Good Mothers and One Which Has Just Commenced to Sit.

(By ELIZABETH PUTNAM.) If hens are used for hatching, select where possible, those which have proved good mothers. As a rule this maternal ability will prove the same from year to year, and those which have deserted or broken eggs carelessly will in all probability prove unfaithful to the end. If a hen has already been broody for a week or two, she may grow tired before the eggs hatch. Choose preferably one that has just commenced to sit.

Fill the corners of her box with road dust or ashes. Lay in a heavy sheet of paper saturated with kerosene. Add more dust or ashes, and lastly straw sprinkled with insect powder. Give her the eggs at night. It is sometimes advisable to throw an old piece of carpet over the nest for a day or so until she is fully settled.

Keep food, grit, water and dust bath where she can have access to them daily, but watch that she does not leave her nest for more than half an hour at a time unless the weather is very warm.

The shipping of day-old chicks had come to be quite a business. As they need not feed for the first 48 hours this plan is feasible and those having no facilities for hatching and yet desiring well bred chicks are glad to avail themselves of the opportunity, the usual price being about ten cents each.

The average brooder will safely handle just about half the number of chicks for which it is claimed to be made. Crowding is almost certain to bring dire results. Be chary of the home-made brooder with lantern heat. There is danger of asphyxiation unless it is properly constructed.

Cull out the scrubs and unprofitable members of the flock. Breed up continually. Feed well and in variety. Supply grit and oyster shell, and remember that clean water is a necessity. Keep the fowls comfortable and free from vermin. And then if they are not profitable, do not rest satisfied until you have hunted out the reason—for there surely is one.

## INFERTILE EGGS IN DEMAND

Absolutely No Necessity for Keeping Roosters With Hens After Breeding Season is Over.

(By J. A. HELMREICH, Colorado Experiment Station.) There is absolutely no reason for keeping the male birds with the laying hens after the breeding season is over. Some people seem to think that the rooster has to be with the hens in order to get eggs; this is not true. On the contrary, careful experiments have proven that a flock of laying hens will actually produce more eggs without the male birds running with them.

Infertile eggs are always in demand, for they will stand shipping, keep in hot weather and bring top prices on the market. It is also a mistaken idea that fertile eggs have to be in an incubator before the germ grows and develops. The growth will take place, no matter whether the eggs are in an incubator, in a hot country store, in a hot living room, in wagon en route to market over a hot country road, or exposed to heat in any other manner or place. Eggs are among the most perishable of all foods. A fertile egg kept in a warm room will become unfit for human food almost as quickly as milk, because of the germs developing, while an infertile egg will keep for two weeks under the same conditions which will cause a fertile egg to become unfit for human food in twenty-four hours.

## GUNS FOR POULTRY THIEVES

Use of Electric Contrivances Most Satisfactory Way of Getting Rid of Roast Robbers.

There is a much more satisfactory way to get rid of poultry thieves than killing or injuring people; namely, to frighten them off the premises, says Poultry Journal. One man who uses electric wires connected with an alarm in his bedroom, when it went off went out and caught the thief very neatly. Another man uses an electric searchlight such as automobiles often carry. It consists of a dry battery and a small electric light. All that had to be done was to put it in place and connect it with the door so that a spring will light it. Mr. Thief will skedaddle as soon as he has such a bull's-eye pointed at him. Still another man uses a big gong such as those used in railway stations. It is connected with a clock set to go off when the door is opened. Perhaps a better way would be to have it connected with an electric battery. Such apparatus as these cost very little and they are exceedingly effective in frightening thieves away. Nothing is better than light. One woman who owned a house some distance from her neighbor's had electric light buttons in various places so she could light up the whole premises—not only the house, but the barns.

**Food for the Hens.** Hens will get a good deal of their food in the fields if they have a chance, but try them with a bit more every morning and night. A bit too much is better than hunger.

**The Livingston Apple.** Among the seedling fall apples, which have been recently sent to the Geneva experiment station the Livingston Pride deserves mention. It is a chance seedling from Orange county. The fruit is large, skin light yellow, shaded and striped with carmine. When cooked it is quite attractive in appearance and good in quality. It is not a desert fruit, but is probably worth testing for culinary use. Season is the last of September and well into October.

**Important to Animals.** In addition to the protein, carbohydrates and fats, usually considered the most important constituents of feeds, the mineral or ash is of great importance to animals.

# DAIRY FACTS

## TWELVE GOOD SILO REASONS

Farmers' Bulletin Tells Farmer Should Provide Himself With Huge Receiptable for Feed.

T. E. Woodward of the "Dairy Division" in Farmers' Bulletin 555, furnishes 12 good and well-considered reasons for the farmer providing himself with a silo. Every one of them touches some spot of vital importance to the larger profit of dairy farming. Here they are:

1. More feed can be stored in a given space in the form of silage than in the form of fodder or hay.
2. There is a smaller loss of food material when a crop is made into silage than when cured as fodder or hay.
3. Corn silage is more efficient feed than corn fodder.
4. An acre of corn can be placed in the silo at less cost than the same area can be husked and shredded.
5. Crops can be put in the silo during weather that could not be utilized in making hay or curing fodder.
6. More stock can be kept on a given area of land when silage is the basis of the ration.
7. There is less waste in feeding silage than in feeding fodder. Good silage properly fed is all consumed.
8. Silage is very palatable.
9. Silage, like other succulent feeds, has a beneficial effect upon the digestive organs.
10. Silage is the cheapest and best form in which a succulent feed can be provided for winter use.
11. Silage can be used for supplementing pastures more economically than can soiling crops, because it requires less labor, and silage is more palatable.
12. Converting the corn crop into silage clears the land and leaves it ready for another crop.

## MAKE THE COWS PROFITABLE

In Place of Economizing With Feed It Is Better to Give Dairy Animals a Liberal Supply.

(By G. H. GORDON.) With good cows there must also be good feeding. The dairy cow cannot produce milk without a good supply of nourishing food from which to produce the milk. Also the food given may be very rich in feeding value but often not enough of it is fed to the cow.

Thus the cows get only food enough to maintain their bodies and very little of it goes to the production of milk. This, of course, would be feeding at a loss when a little more food added to this would all be turned to milk as the other food has already supplied the wants of the body and this extra food is the paying food. The milk it produces pays for all the food and leaves a clear profit beside.

Therefore, can we afford to withhold this extra food and feed only enough



A Profitable Herd.

to maintain the body? Such feeding would certainly not be profitable.

So, in place of economizing with the feed it would be better to give the cows a rich supply and get the milk which, after all, is what we are feeding for.

But there comes the question of what is a good supply of food? We might supply the cows with an unlimited amount of food, in fact we might supply them with all they can consume and still get no milk flow of worth if such food does not contain the proper nutrient.

It is not only a bulk of food that is necessary, but it is the nutritive value of the food given that counts.

As concentrated foods are the richest in food-value the cows should be supplied with such food as wheat bran and ground corn at least twice a day with their ration.

If the dairy is not paying there is something wrong. Either the cows are poor or the management is poor. There is a way to make it pay. Let us study our business and seek the way to make it pay.

### Dogs Drive Sheep Raising Out.

A survey made by the United States department of agriculture indicates that if there were a proper control of dogs the number of sheep on the farms could be doubled without displacing other stock. The sheep would fit in a niche of their own. Dogs have driven many farmers out of the sheep business.

**Allow Free Range.** Both hen and chicks should be allowed free range after the chicks are a few days old, to pick up a large share of their living, but in addition it is a good plan to feed them at night and to give them all they will eat, as they will grow faster and will either be marketable at an earlier age or weigh more, and consequently bring more, at a given time.

## GIVE COWS FEED REGULARLY

Of Great Importance That Strict Regularity Be Observed in Both Feeding and Milking.

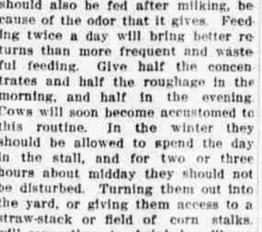
(By T. L. HAECKER, Dairy and Animal Husbandman, University Farm, St. Paul, Minn.)

It is of great importance that strict regularity should be observed, both in feeding and in milking. In order to secure the greatest degree of contentment in the herd. If cows are fed at stated intervals, they will not worry for food until the time for feeding arrives. If it is then given to them in proper quantity, they will eat and lie down, chew the cud and sleep or rest contentedly until time for another feed. First give the grain mixture and milk the cows while they are eating it. This routine is recommended because, with some cows, the milk comes more freely while they are eating that portion of their ration which has the most relish. Cured roughage should be fed after milking because it fills the air in the barn with dust. Succulent feed, like silage and roots should also be fed after milking, because of the odor that it gives. Feeding twice a day will bring better returns than more frequent and wasteful feeding. Give half the concentrates and half the roughage in the morning, and half in the evening. Cows will soon become accustomed to this routine. In the winter they should be allowed to spend the day in the stall, and for two or three hours about midday they should not be disturbed. Turning them out into the yard, or giving them access to a straw-stack or field of corn stalks, will cause them to shrink in milk, no matter how much or how well they may be fed in the morning and evening. No more feed should be given than they will eat up. The mangers should be absolutely clean and free from any feed, during the day and night.

## RACK FOR AIRING MILK PANS

Slatted Device Put on Posts as Illustrated Will Prove Quite Efficient—Is Easily Made.

A slatted rack for airing milk pans and other milk utensils may be made easily. A shelf 3 by 4 1/2 feet will hold a good many vessels. The slats are made of one by two-inch strips placed four inches apart. The shelf or rack



Handy for Airing Utensils.

may be put on posts as illustrated, writes T. L. Haecker, in Missouri Valley Farmer. Vessels may be turned upside down upon it, and they will catch the air from underneath.

## PLANS AN ACTIVE CAMPAIGN

President of Suffrage Association, Mrs. Walter McNabb Miller, to Tour State.

Plans for an active campaign are now being made by the Missouri Equal Suffrage association. Mrs. Walter McNabb Miller, who so ably conducted the work of securing petitions for the amendment, will conduct the campaign. She plans a trip to Chicago July 24, to consult some leaders of the national association as to methods and speakers, and will then tour the state, securing county chairmen to take charge of polling counties, making dates for speakers and distributing literature.

Already the National Woman Suffrage association has sent \$199 a month and literature costing the same amount, as its part in assisting the Missouri women to carry amendment 13. In September Dr. Anna Shaw will make a series of speeches for suffrage, and Miss Jane Thompson, a Missouri girl who is now a regular organizer for the national association, will do work in Missouri in October.

An effective press service is already in operation, under the direction of Mrs. Emily Newell Blair of Carthage. Anyone or any newspaper desiring material or wishing to be placed on bulletin or plate service will communicate with her.

Miss Ruth White of Kansas City, daughter of J. B. White, the lumber millionaire, is chairman of literature, and has ready to be distributed a number of folders and booklets giving the opinions of prominent Missourians on suffrage.

Miss Charlotte Rumbold, who conceived the idea of the great St. Louis pageant and acted as secretary to the national association, being as much responsible as any other one person for its tremendous success, will be chairman of county fairs and chauntaus, having under her a number of young girls who will present the "Voiceless Speech" at public gatherings and distribute literature.

Aug. 15 will be set aside as "Sacrifice Day" by Missouri suffragists, when each loyal suffragist will be expected to make some denial that she may send the money saved thereby for the campaign. In the meantime all contributions may be sent to Miss Mary E. Buckley, 5842 Barnier avenue, St. Louis, Mo.

**Ohio State President Sends Message to Missouri Suffragists.**

"Whatever may be the policies in other nations and other states, the Ohio campaign for woman suffrage will be a peaceful one. There will be no quarrel between men and women."

"Men are not to blame that women are still unfranchised. Neither are women. Woman's political enfranchisement is one of evolution. Radical men and radical women help on the evolution. Conservative men and conservative women hold it back, the former are recruited from the latter, and when the radicals outnumber the conservatives the change comes. There must be no conflict, no wounds to bind up, because a great work for men and women to do together lies ahead. There must be trust and comradeship in order that this work may be done easily and effectively."

"The long journey of Ohio suffragists is nearly at an end, and they are joyful over the fact that they have no apologies to make for their conduct and that no one has suffered at their hands."

"Ohio and Missouri are drawn close together, since both are working to the same end, with the same means, in the same way, and go to vote at the same time. Success to both!"

"MARRIET TAYLOR UFTON, President Ohio Woman Suffrage Association."

**Profit in Keeping Hogs.** One man says: "With bacon at 25 and 30 cents a pound it pays to keep hogs and keep them right." There is no question about profit in keeping hogs right, but at the same time the big hole in the proposition is the fact that the producer is not getting 25 and 30 cents a pound for the bacon.

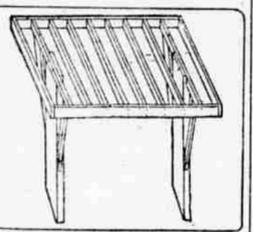
# FARM ANIMALS



## ATTENTION TO YOUNG FOALS

Within an Hour After Arrival of Colt It Should Be Standing and Getting First Milk.

(By I. C. BARNES, Colorado Experiment Station.) If the mare foals in barn, one should provide her with a roomy box stall with plenty of straw. Within an hour after the arrival of the colt it should be standing and getting its first nourishment. If it cannot stand give it help, as the first milk is valuable not only as a food but also as a natural purge which rids the intestines of the meconium.



Handy for Airing Utensils.

It is well to put a wide bandage around the body of the colt and protect the navel from becoming infected from the stable. Some use a dusting powder of equal parts tannic and boric acid on the navel before applying the bandage. The navel should be kept protected until it becomes dry.

If the colt strains considerably soon after birth one should relieve this suffering by warm water injections. If the first feces are very hard a dose of raw linseed oil will be advisable.

## GET MOST OUT OF DAIRYING

Keep Records, Cull Out Unprofitable Cows and Pay More Attention to Individual Feeding.

We talk about the drudgery of dairying, and it is rather a binding business, but it is the poor half of the herd that makes it so. Keep records, weed out those poor cows, pay more individual attention to the rest, feeding them up to their capacity to respond, and feed the rest of the field products to sheep or colts or steers or heifer calves, or even sell them outright. Cull out the unprofitable part of the herd and don't do it by guesswork. Some people think that they can tell by the looks of a pail how much milk there is in it. Any man who has not actually weighed or measured several milkings will be inclined to exaggerate the amount by from 25 to 50 per cent.

**TWO GREAT DAIRY PROBLEMS**

Success of Dairyman Depends on His Ability to Cope With Labor and Feeding Questions.

The dairy farmer has two great problems confronting him at all times; namely, the labor and the feeding problems. His success depends largely on his ability to cope with them, and especially with the feeding problem. His cows are, in a measure, machines through which raw materials pass and are turned out as finished products, the quality of which are determined by the individual cow. If the raw material is not "balanced" the result may be fat on the cow's back instead of milk in the pail; it may mean flesh from the cow's body to make milk, or a waste of material altogether. If not supplied in sufficient quantities the machine discontinues its work and the cow goes dry.

Far too many dairymen work on the assumption that if their cows are fed all they will eat or clean up nicely of feeds affording variety they are doing their best. The question of feed composition should receive more thought. A man may easily feed unbalanced rations that will waste enough material for which he has to pay high prices to make his business unprofitable, even under otherwise favorable conditions.

**Size of Silo.** The silo must not be too large. The size should always be determined by the number of cattle or sheep to be fed. As silage is a moist feed that soon decays when exposed to the air, it must be taken off systematically from the top. At least two inches should be removed daily, hence the silo should not be built out of proportion to the number of animals to be fed.

**Cow Test Association.** The cow test association will not make the milk your cows are giving any richer, but it will make the amount of butter fat you gather from day to day greater if you follow the advice it gives you.

## HOG AS "MORTGAGE LIFTER"

One Great Enemy to the Industry is Cholera—Eternal Vigilance Will Control Disease.

(By GEORGE H. GLOVER, Colorado Experiment Station.)

There should be, and usually is, more money made in raising hogs on the farm than other animals. Aside from cholera, hogs are less subject to disease, reproduce faster, and make better gains per pound of feed consumed. The annual increase of hogs, cattle and sheep, ranges from 50 to 100 per cent. The increase of hogs should be from 500 to 1,500 per cent. The sow has the advantage in bringing forth two litters a year and farrows several at each litter.

Doctor Warrington in "Chemistry on the Farm" states that for each 100 pounds of feed consumed, the different farm animals make gains as follows: Cattle, nine pounds; sheep, 11 pounds, and pigs, 23 pounds. Pigs then make nearly two and a half times the gain over cattle for the amount of feed consumed.

The man who hauls hogs to market instead of corn is the one who should make money. Because of the fact that hog raising, when properly managed, has been so profitable, the hog has been styled the "Mortgage lifter." The one enemy to the business is hog cholera. No doubt much can be done in controlling cholera by the farmers co-operating in adopting measures which will prevent the dissemination of cholera. It is up to the farmers themselves, on last analysis, to confine cholera on the one farm where it starts, by strictly following the advice of sanitary authorities and all working together to this end. I know of a farmer who kept his hogs healthy for four years, while the neighbors all around him were losing their hogs from cholera. He did it by an eternal vigilance in keeping infection out, and this man made a regular chore of cleaning the hog pens every Saturday afternoon.

**DAIRYMEN MUST MOVE QUICK**

Three Things Menace Industry: Inefficient Cow, Antiquated Methods and Ignorance of Public.

(By EUGENE DAVENPORT, Illinois Agricultural College.)

A good deal is going to happen in dairying within the next 25 years. Dairy husbandry represents the most intensive form of agriculture practiced on this side of the water. We have been so busy about other things that we have not yet settled down to the development of the industry in this country. I think the individual dairyman has his attention too exclusively on his personal affairs, and too little upon the industry he represents. When I see a man advocating a system of buying cows instead of feeding them I know that he is looking at it purely from the individual standpoint. He knows, or ought to know that no business can thrive on that basis.

What you need to do and what we all need to do—and do it quickly—is to attend to those things that will establish the dairy business as a whole upon a solid basis.

There are three things that today menace the prosperity of the dairy business: First, the inefficient cow; second, antiquated methods; and third, the general public, our consumers, do not realize as they ought the food value of dairy products. How do milk, butter or cheese compare in the best markets as a food product—value for value—with the other products of this country? No comparison!

What we need to have three campaigns of education—one among ourselves for better cows, another among ourselves for better methods in order to make a better product, and another among the consumers to help them realize what dairy products are really worth.

It is up to the dairymen to educate both themselves and the general public and I believe they can do it. We must look a long way ahead. There are some things that must be done now for the improvement of dairying 20 years from now.

**CONTROL OF THE CORN SMUT**

Disease Cannot Be Restrained by Treating Seed—One-Year Rotation is One Recommendation.

(By W. W. ROBBINS, Colorado Agricultural College.)

The question is frequently asked: Can corn smut be controlled by treating the seed? It cannot. For the most part, corn smut spores rest over the winter in the soil or in the manure pile. Infection of the corn plant may take place at any time during its life, although usually not until it has attained a height of two or three feet. Furthermore, infection may take place in any part of the plant where there is fresh growing tissue.

Corn should never be planted on soil that grew a smutted crop the previous year. A one-year rotation is usually sufficient to destroy a large number of smut spores resting over in the soil. Remove and burn the smutted masses on the young plants. Corn smut spores pass through the alimentary canal of stock without having their germinating power destroyed. This probably explains the fact that fields heavily manured often suffer more from corn smut than those lightly manured or not manured at all. The spores, however, do not live long in the manure. Hence old manure is better than fresh to spread on a cornfield. It is known that some varieties of corn are more susceptible to smut than others and it is also very probable that a variety that is not acclimated is more subject to smut than one well acclimated.

**Keynote to Profit.** Pure bred dairy cattle will often be the keynote to great profit from the farm. What is the use of keeping an indifferent, non-producing animal of any description when one that will make a handsome profit will take no more room, no more care and no more feed.

**Chickens Relish Salt.** Chickens, like every animal, will eat salt if they can get it, but are quickly and easily satisfied and will not eat more than is good for them, unless it is mixed with mash or some other soft feed; then there is a possibility of their eating too much.

# ORCHARD TOPICS



## DAMAGE BY ALFALFA WEEVIL

Insect Has Proved Most Destructive Pest in Western States—Measures for Eradication.

The insect known as the alfalfa weevil (*Phytonomus posticus* Gyll.) is about the size of a grain of wheat, brown in color, with a long slender snout, much like the plum curculio. Imported from the eastern hemi-



Adult Form of the Alfalfa Weevil (*Phytonomus Posticus*): Adults Clustering on and Attacking a Spray of Alfalfa. (Slightly Enlarged.)

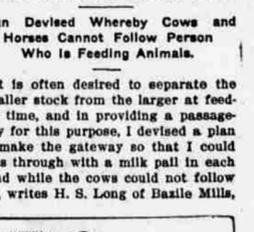
where it has become established in the region of country near Great Salt Lake, Utah, whence it has spread into Idaho and Wyoming. It has proved a most destructive pest of alfalfa and the production of seed has been impossible in the localities where it has occurred. It is being investigated by the United States department of agriculture in order to find some means of preventing or reducing its ravages. These measures have consisted of the application of mechanical devices for destroying the young weevils in the fields, destroying the adults in their hibernating places, and the introduction of its natural enemies into this country from Europe, where they seem to effectually prevent serious injuries from its attacks on alfalfa.

**Care in Covering Seeds.** Too much care cannot be exercised in covering seed properly. The tendency is to cover too deeply. Such crops as onions, squash, parsnips and lima beans push up the shells of the seed itself and find it difficult to force their way through a very great depth of earth after it is packed down by rains.

**GOOD GATE FOR STOCK FARM**

Plan Devised Whereby Cows and Horses Cannot Follow Person Who Is Feeding Animals.

It is often desired to separate the smaller stock from the larger at feeding time, and in providing a passage-way for this purpose, I devised a plan to make the gateway so that I could pass through with a milk pail in each hand while the cows could not follow me, writes H. S. Long of Bazile Mills,



Excellent Farm Gate.

Neb., in Popular Mechanics. This plan was realized as shown in the sketch. The smaller animals, such as hogs, chickens and sheep can pass through the V-shaped part, but a horse or cow could not make the turn. The small swinging gate can be fastened to one side, to make a permanent